

Notice of Allowability

Application No.

10/673,483

Examiner

Khai M. Nguyen

Applicant(s)

SENARATH ET AL.

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/28/2006.
2. ☒ The allowed claim(s) is/are 4-20 and 23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Allowable Subject Matter

1. Claims 4-20, and 23 are allowed.

The following is a statement of reason for the indication of allowance: As the applicant stated in the remarks of the amendment filed on 8/25/2005, 3/9/2006, and 9/28/2006.

Applicant's independent claim 4: The present invention is directed to in a cellular communication system of the type where base stations are equipped with directional antennas that can assume one of I number of directions of transmissions where $I > 2$, a method of increasing downlink coverage and traffic capacity, comprising as define is the specification (paragraph 0021-0040). The independent claim identifier the uniquely distinct feature "a first base station, successively directing a first radio beam in I number of directions A (i) according to a first beam rotation scheme, where i is [2,I]; and at a second base station adjacent to said first base station, successively directing a second radio beam in I number of directions B(i) according to a second beam rotation scheme; wherein said first beam rotation scheme and said second beam rotation scheme form J number of reception timeslots T(j) for user equipment located within said first radio beam and said second radio beam, each of said reception timeslots T(j) having different channel conditions, and said second base station allocating said reception timeslots T(j) according to quality of service requirements of each said user equipment". Applicant's independent claim 4 comprises a particular combination of element, which is neither taught non-suggested by prior art.

Applicant's independent claim 23: The present invention is directed to in a method for controlling interference between first and second traffic carrying beams of adjacent cells of a cellular radio system, said method comprising as define is the specification (paragraph 0021-0040). The independent claim identifier the uniquely distinct feature "(d) selecting a reception timeslot from said different timeslots that corresponds to an optimal C/I ratio for user equipment residing within a location covered by both said first and second beams wherein steps (c) and (d) include: differentiating said reception timeslot in said first radio beam and said second radio beam; associating each said reception timeslot with a respective location in a first sector covered by said first radio beam; and allocating to user equipment a reception timeslot in said first radio beam so as to maximize overall system capacity and coverage performance based on channel quality conditions of said different timeslots for said user equipment".

Applicant's independent claim 23 comprises a particular combination of element, which is neither taught non-suggested by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

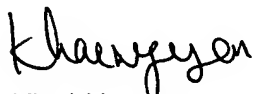
Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571.272.4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Khai Nguyen
Au: 2617

11/15/2006


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER